

## EAST Search History

Ref #	Hits	Search Query	DBs	Default Operator	Plurals	Time Stamp
L1	2	("20030233234").PN.	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2007/06/03 13:04
L2	3698	(voice near3 user near3 interface) or VUI	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2007/06/03 13:05
L3	27	2 & (form near3 filling)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2007/06/03 13:32
L4	21	3 & (@ad<"20031103" @rlad<"20031103")	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2007/06/03 14:46
L5	6	4 & tempo\$3	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2007/06/03 13:10
L8	1585	"audio form\$"	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT	OR	OFF	2007/06/03 13:24
L9	1307	8 & (@ad<"20031103" @rlad<"20031103")	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2007/06/03 13:25

6/3/07

## EAST Search History

L10	1324	715/500.1	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2007/06/03 13:25
L11	9	8 & 10	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2007/06/03 13:25
L12	1307	9 & (@ad<"20031103" @rlad<"20031103")	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2007/06/03 13:26
L13	6	11 & (@ad<"20031103" @rlad<"20031103")	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2007/06/03 13:27
L14	1	9 & (tempo\$3 near3 locat\$3)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2007/06/03 13:28
L16	1	(audio same tempo\$3 same location) & (form near3 filling)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2007/06/03 13:34
L17	2	("6,484,156").PN.	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2007/06/03 13:33

## EAST Search History

L18	1	17 & (audio same tempo\$3 same location)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2007/06/03 13:34
L19	0	18 & (form near3 filling)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2007/06/03 13:34
L20	1	18 & (form )	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2007/06/03 13:34
L21	99	("4,667,247", "4,837,613", "5,050, 103", "5,185,818", "5,200,740" "5, 233,336" "5,237,313" "5,255,357" "5,546,528" "5,625,711" "5,634,064" "5,729,637" "5,737,599" "5,754,873" "5,781,785" "5,819,301" "5,832,530" "5,832,531" "5,835,634" "5,860,074" "5,929,866" "5,930,813" "5,943,063" "5,995,086" "5,999,649" "6,028,583" "6,049,339" "6,073,148" "6,185,684" "6,205,549" "6,275,587" "6,289,364" "6,324,555" "6,385,350" "6,408,092" "6,411,730" "6,415,278" "6,421,460" "6,466,210" "6,507,848" "6,515,675" "6,563,502" "6,604,105" "6,639,593" "6,678,410" "6,701,023" "6,711,557" "6,720,977" "6,748,111" "6,754,382" "6,771,816").pn.	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT	OR	OFF	2007/06/03 13:36
L22	2	"20040205081".pn.	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT	OR	OFF	2007/06/03 13:36
L23	2	"5369265".pn.	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT	OR	OFF	2007/06/03 13:36
L24	2	("5155344"   "5245167").PN.	US-PGPUB; USPAT; USOCR	OR	OFF	2007/06/03 13:36

## EAST Search History

L25	2	"6624826".pn.	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT	OR	OFF	2007/06/03 13:36
L26	10	("5679075"   "5782692"   "5799280"   "5983220"   "5986660"   "6041335"   "6084590"   "6119147"   "6154771"   "6333753").PN.	US-PGPUB; USPAT; USOCR	OR	OFF	2007/06/03 13:36
L27	9391	"paper form\$"	US-PGPUB; USPAT; USOCR	OR	OFF	2007/06/03 13:36
L28	2229	L27 & scanning	US-PGPUB; USPAT; USOCR	OR	OFF	2007/06/03 13:36
L29	757	L28 & fields	US-PGPUB; USPAT; USOCR	OR	OFF	2007/06/03 13:36
L30	1	"6624826".pn.	US-PGPUB; USPAT; USOCR	OR	OFF	2007/06/03 13:36
L31	5	("6624826").URPN.	USPAT	OR	OFF	2007/06/03 13:36
L32	10	("20020109712"   "20030085913"   "6084590"   "6108001"   "6121963"   "6333753"   "6369835"   "6480191"   "6624826"   "6665835").PN.	US-PGPUB; USPAT; USOCR	OR	OFF	2007/06/03 13:36
L33	5	("6624826").URPN.	USPAT	OR	OFF	2007/06/03 13:36
L34	14892	("bar code" barcode) & document	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT	OR	OFF	2007/06/03 13:36
L35	11	"barcoded document"	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT	OR	OFF	2007/06/03 13:36
L36	22	barcoded same forms	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT	OR	OFF	2007/06/03 13:36
L37	27	("5625562").URPN.	USPAT	OR	OFF	2007/06/03 13:36
L38	4709	"paper form"	USPAT	OR	OFF	2007/06/03 13:36
L39	342	L38 & (barcode barcoded "bar code")	USPAT	OR	OFF	2007/06/03 13:36

## EAST Search History

L40	80	("5060980").URPN.	USPAT	OR	OFF	2007/06/03 13:36
L41	80	("5060980").URPN.	USPAT	OR	OFF	2007/06/03 13:36
L42	16	("3643069"   "3933094"   "4013997"   "4248528"   "4254329"   "4478584"   "4494862"   "4588211"   "4634148"   "4665004"   "4704517"   "4724309"   "4728984"   "4757348"   "4786940"   "4864111").PN.	US-PGPUB; USPAT; USOCR	OR	OFF	2007/06/03 13:36
L43	80	("5060980").URPN.	USPAT	OR	OFF	2007/06/03 13:36
L44	97	"audio browser"	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT	OR	OFF	2007/06/03 13:36
L45	28	L44 & field\$	USPAT	OR	OFF	2007/06/03 13:36
L46	1585	"audio form\$"	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT	OR	OFF	2007/06/03 13:36
L47	66	L46 & "data field\$"	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT	OR	OFF	2007/06/03 13:36
L48	5	("6519564").URPN.	USPAT	OR	OFF	2007/06/03 13:36
L49	26	L45 & (time temporal)	USPAT	OR	OFF	2007/06/03 13:36
L50	6342	roylance	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT	OR	OFF	2007/06/03 13:36
L51	1837	L50 & samsung.as.	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT	OR	OFF	2007/06/03 13:57
L52	2	("5060980").PN.	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2007/06/03 13:57

## EAST Search History

L53	22	(US-20040205081-\$ or US-20020067854-\$ or US-20020075507-\$ or US-20030028494-\$ or US-20030004755-\$ or US-20070005795-\$ or US-20040221323-\$).did. or (US-5369265-\$ or US-6624826-\$ or US-5781785-\$ or US-5672060-\$ or US-5060980-\$ or US-5625562-\$ or US-4985930-\$ or US-4578572-\$ or US-6816274-\$ or US-6711714-\$ or US-6519564-\$ or US-6895084-\$ or US-6501832-\$ or US-6484156-\$). did. or (US-20030028494-\$).did.	US-PGPUB; USPAT; DERWENT	OR	OFF	2007/06/03 14:31
L54	7	53 & (data near3 field\$1)	US-PGPUB; USPAT; DERWENT	OR	OFF	2007/06/03 14:33
L55	4	54 & tempo\$3	US-PGPUB; USPAT; DERWENT	OR	OFF	2007/06/03 14:40
L56	0	(tempo\$3 near3 location) same (filling near3 form)	US-PGPUB; USPAT; DERWENT	OR	OFF	2007/06/03 14:41
L57	7	(tempo\$3 near3 location) & (filling near3 form)	US-PGPUB; USPAT; DERWENT	OR	OFF	2007/06/03 14:43
L58	0	((voice audio) near2 based) & (filling near3 form) & (tempo\$3 near3 location)	US-PGPUB; USPAT; DERWENT	OR	OFF	2007/06/03 14:44
L59	0	((voice audio) near2 based) & (on near2 line near3 form) & (tempo\$3 near3 location)	US-PGPUB; USPAT; DERWENT	OR	OFF	2007/06/03 14:44
L60	0	(voice audio) & (on near2 line near3 form) & (tempo\$3 near3 location)	US-PGPUB; USPAT; DERWENT	OR	OFF	2007/06/03 14:44
L61	818	(voice audio) & ( form) & (tempo\$3 near3 location)	US-PGPUB; USPAT; DERWENT	OR	OFF	2007/06/03 14:51
L62	1	((voice audio) near2 based) & (tempo\$3 near3 location) & filling	US-PGPUB; USPAT; DERWENT	OR	OFF	2007/06/03 14:46
L63	21	((voice audio) near2 based) & (tempo\$3 near3 location) & (data near3 field\$1)	US-PGPUB; USPAT; DERWENT	OR	OFF	2007/06/03 14:48

## EAST Search History

L64	9	63 & (@ad<"20031103" @rlad<"20031103")	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2007/06/03 14:51
L65	0	(on near2 line near3 form) & ((voice audio) near2 based) & (tempo\$3 near3 location) & (data near3 field\$1)	US-PGPUB; USPAT; DERWENT	OR	OFF	2007/06/03 14:49
L66	1	(online near3 form) & ((voice audio) near2 based) & (tempo\$3 near3 location)	US-PGPUB; USPAT; DERWENT	OR	OFF	2007/06/03 14:49
L67	58	(voice audio) & ( form) & (tempo\$3 near3 location) & (bar near2 code)	US-PGPUB; USPAT; DERWENT	OR	OFF	2007/06/03 14:53
L68	27	67 & (@ad<"20031103" @rlad<"20031103")	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2007/06/03 14:56
L69	1	((voice audio) near2 forms) & (tempo\$3 near3 location) & (bar near2 code)	US-PGPUB; USPAT; DERWENT	OR	OFF	2007/06/03 14:55
L70	1570	form near3 barcode	US-PGPUB; USPAT; DERWENT	OR	OFF	2007/06/03 14:55
L71	0	((voice audio) near2 forms near2 barcode) & (tempo\$3 near3 location)	US-PGPUB; USPAT; DERWENT	OR	OFF	2007/06/03 14:56
L72	0	((voice audio) near2 barcode) & (tempo\$3 near3 location)	US-PGPUB; USPAT; DERWENT	OR	OFF	2007/06/03 14:56
L73	28	((voice audio)same barcode) & (tempo\$3 near3 location)	US-PGPUB; USPAT; DERWENT	OR	OFF	2007/06/03 14:56
L74	7	73 & (@ad<"20031103" @rlad<"20031103")	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2007/06/03 15:01

## EAST Search History

L75	88	(voice audio) & (barcode same form same data same field\$1)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2007/06/03 15:03
L76	7	74 & (@ad<"20031103" @rlad<"20031103")	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2007/06/03 15:03
L77	964	(barcode same data same field\$1)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2007/06/03 15:04
L78	7	76 & (@ad<"20031103" @rlad<"20031103")	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2007/06/03 15:04
L79	37	(barcode near2 (data near2 field\$1))	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2007/06/03 15:08
L80	27	79 & (@ad<"20031103" @rlad<"20031103")	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2007/06/03 15:09
L81	1349	(barcode near2 form)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2007/06/03 15:08

## EAST Search History

L82	917	81 & (@ad<"20031103" @rlad<"20031103")	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2007/06/03 16:50
L83	247	82 & (audio voice)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2007/06/03 15:33
L84	44	83 & OCR	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2007/06/03 15:09
L85	0	83 & (tempo\$3 near3 location)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2007/06/03 15:24
L86	47	barcode & (tempo\$3 near3 location)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2007/06/03 15:31
L87	22	86 & (@ad<"20031103" @rlad<"20031103")	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2007/06/03 15:32
L88	10	87 & (data near2 fields)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2007/06/03 15:15

## EAST Search History

L89	10	88 & form	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2007/06/03 15:32
L90	8	89 & ((audio voice) near3 media)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2007/06/03 15:24
L91	23	us same patent same barcode	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2007/06/03 15:24
L92	0	91 & (tempo\$3 near3 location)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2007/06/03 15:32
L93	11	barcode & (tempo\$3 near3 location) & (data near2 fields)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2007/06/03 15:27
L94	10	93 & (audio voice)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2007/06/03 15:28
L95	342	L38 & (barcode barcoded "bar code")	USPAT	OR	OFF	2007/06/03 15:31
L96	47	barcode & (tempo\$3 near3 location)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2007/06/03 15:31

## EAST Search History

L97	0	95 & 96	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2007/06/03 15:31
L98	0	95 & (tempo\$3 near3 location)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2007/06/03 16:26
L99	340	95 & (@ad<"20031103" @rlad<"20031103")	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2007/06/03 15:32
L100	340	99 & form	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2007/06/03 15:33
L101	98	100 & (data near2 fields)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2007/06/03 15:33
L102	23	101 & (audio voice)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2007/06/03 16:09
L103	0	"audio browser" same barcode	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT	OR	OFF	2007/06/03 16:10

## EAST Search History

L104	0	"audio browser" & barcode	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT	OR	OFF	2007/06/03 16:13
L105	1	xform and (voice near2 xml)	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT	OR	OFF	2007/06/03 16:48
L106	2	("20020194219").PN.	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2007/06/03 16:18
L107	0	("106&(voiceaudio)").PN.	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2007/06/03 16:18
L108	0	106 & (voice audio)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2007/06/03 16:20
L109	2	("7197515").PN.	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2007/06/03 16:20
L110	1	109 & (voice audio)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2007/06/03 16:23

## EAST Search History

L111	26	(US-20040205081-\$ or US-20020067854-\$ or US-20020075507-\$ or US-20030028494-\$ or US-20030004755-\$ or US-20070005795-\$ or US-20040221323-\$ or US-20070118426-\$ or US-20020194219-\$).did. or (US-5369265-\$ or US-6624826-\$ or US-5781785-\$ or US-5672060-\$ or US-5060980-\$ or US-5625562-\$ or US-4985930-\$ or US-4578572-\$ or US-6816274-\$ or US-6711714-\$ or US-6519564-\$ or US-6895084-\$ or US-6501832-\$ or US-6484156-\$ or US-6766298-\$ or US-7197515-\$). did. or (US-20030028494-\$).did.	US-PGPUB; USPAT; DERWENT	OR	OFF	2007/06/03 16:22
L112	8	111 & tempo\$3	US-PGPUB; USPAT; DERWENT	OR	OFF	2007/06/03 16:23
L113	3	"20030188260"	US-PGPUB; USPAT; DERWENT	OR	OFF	2007/06/03 16:23
L114	0	113 & (voice audio)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2007/06/03 16:24
L115	2	113 & (voice audio sound speed)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2007/06/03 16:24
L116	0	113 & (voice audio sound speech)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2007/06/03 16:25
L117	2	("20040003341").PN.	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2007/06/03 16:25

## EAST Search History

L118	1	117 & (voice audio sound speech)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2007/06/03 16:25
L119	0	118 & (tempo\$3 near3 location)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2007/06/03 16:49
L120	67	xform & (voice audio speech)	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT	OR	OFF	2007/06/03 16:48
L121	0	120 & (tempo\$3 near3 location)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2007/06/03 16:49
L122	0	xfom & (tempo\$3 near3 location)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2007/06/03 16:49
L123	0	xform & (tempo\$3 near3 location)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2007/06/03 16:49
L124	105	(xml same form) & (tempo\$3 near3 location)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2007/06/03 16:54

## EAST Search History

L125	23	124 & (@ad<"20031103" @rlad<"20031103")	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2007/06/03 17:01
L126	1	125 & (data near2 fields)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2007/06/03 16:51
L127	0	Xform & (tempo\$3 near3 location) same (data near2 field\$1)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2007/06/03 17:01
L128	0	Xform & ((tempo\$3 near3 location) same (data near2 field\$1))	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2007/06/03 16:55
L129	6	form & (tempo\$3 near3 location) same (data near2 field\$1)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2007/06/03 16:56
L130	6	(audio voice) & (tempo\$3 near3 location) same (data near2 field\$1)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2007/06/03 16:57
L131	6	(audio voice) & ((tempo\$3 near3 location) same (data near2 field\$1))	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2007/06/03 16:59

## EAST Search History

L132	0	dataglyph & ((tempo\$3 near3 location) same (data near2 field\$1))	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2007/06/03 17:00
L133	110	dataglyph	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2007/06/03 17:00
L134	20	dataglyph & (tempo\$3 near3 location)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2007/06/03 17:00
L135	0	XML & (tempo\$3 near3 location) same (data near2 field\$1)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2007/06/03 17:01
L136	234	XML & (tempo\$3 near3 location)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2007/06/03 17:20
L137	113	136 & (@ad<"20031103" @rlad<"20031103")	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2007/06/03 17:20
L138	10	137 & (data near2 fields)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2007/06/03 17:04

## EAST Search History

L139	210	(audio near2 based) & (form near2 complet\$3)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2007/06/03 17:15
L140	161	139 & (@ad<"20031103" @rlad<"20031103")	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2007/06/03 17:07
L141	46	140 & tempo\$3	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2007/06/03 17:07
L142	3	(audio near2 based) same (form near2 complet\$3)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2007/06/03 17:17
L143	35	(audio near2 based) near2 form	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2007/06/03 17:20
L144	11412	audio near2 form	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2007/06/03 17:20
L145	66	144 & (tempo\$3 near3 location)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2007/06/03 17:20

## EAST Search History

L146	47	145 & (@ad<"20031103" @rlad<"20031103")	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2007/06/03 17:28
L147	3	146 & (data near2 field)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2007/06/03 17:25
L148	29	("20040153968" "20050061890" "50 60980" "5486686" "5530950" "5825 006" "6018710" "6540142" "662482 6" "6711714" "6764009" "6823075"  "6882737" "6973477").PN.	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2007/06/03 17:24
L149	1	148 & (data near2 field) & (audio voice speech) & (tempo\$4 same location)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2007/06/03 17:28
L150	0	148 & (data near2 field) & (audio voice speech) & (tempo\$4 near3 location)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2007/06/03 17:36
L151	347	(data near2 field) & (audio voice speech) & (tempo\$4 near3 location)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2007/06/03 17:28
L152	307	151 & (@ad<"20031103" @rlad<"20031103")	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2007/06/03 17:32

## EAST Search History

L153	0	150 & (filling same forms)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2007/06/03 17:30
L154	0	150 & forms	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2007/06/03 17:29
L155	1	152 & (filling same forms)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2007/06/03 17:30
L156	2	152 & (input near3 data near3 fields)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2007/06/03 17:31
L157	307	152 & (data near2 field) & (audio voice speech)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2007/06/03 17:36
L158	108	157 & (temporal)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2007/06/03 18:48
L159	2	("6766298").PN.	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2007/06/03 18:48

## EAST Search History

L160	0	("15&(datasamefield\$1)").PN.	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2007/06/03 18:49
L161	283821	"15" & (data same field\$1)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2007/06/03 18:49
L162	0	59	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2007/06/03 18:49
L163	0	159 & (data same field\$1)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2007/06/03 18:49
L164	1	159 & (structur\$3)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2007/06/03 18:50
L165	1	164 & form	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2007/06/03 18:50

## EAST Search History

L166	99	("4,667,247", "4,837,613", "5,050, 103", "5,185,818", "5,200,740" "5, 233,336" "5,237,313" "5,255,357" "5,546,528" "5,625,711" "5,634,064" "5,729,637" "5,737,599" "5,754,873" "5,781,785" "5,819,301" "5,832,530" "5,832,531" "5,835,634" "5,860,074" "5,929,866" "5,930,813" "5,943,063" "5,995,086" "5,999,649" "6,028,583" "6,049,339" "6,073,148" "6,185,684" "6,205,549" "6,275,587" "6,289,364" "6,324,555" "6,385,350" "6,408,092" "6,411,730" "6,415,278" "6,421,460" "6,466,210" "6,507,848" "6,515,675" "6,563,502" "6,604,105" "6,639,593" "6,678,410" "6,701,023" "6,711,557" "6,720,977" "6,748,111" "6,754,382" "6,771,816").pn.	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT	OR	OFF	2007/06/03 20:23
L167	2	"20040205081".pn.	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT	OR	OFF	2007/06/03 20:23
L168	2	"5369265".pn.	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT	OR	OFF	2007/06/03 20:23
L169	2	("5155344"   "5245167").PN.	US-PGPUB; USPAT; USOCR	OR	OFF	2007/06/03 20:23
L170	2	"6624826".pn.	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT	OR	OFF	2007/06/03 20:23
L171	10	("5679075"   "5782692"   "5799280"   "5983220"   "5986660"   "6041335"   "6084590"   "6119147"   "6154771"   "6333753").PN.	US-PGPUB; USPAT; USOCR	OR	OFF	2007/06/03 20:23
L172	9391	"paper form\$"	US-PGPUB; USPAT; USOCR	OR	OFF	2007/06/03 20:23
L173	2229	L27 & scanning	US-PGPUB; USPAT; USOCR	OR	OFF	2007/06/03 20:23
L174	757	L28 & fields	US-PGPUB; USPAT; USOCR	OR	OFF	2007/06/03 20:23

## EAST Search History

L175	1	"6624826".pn.	US-PGPUB; USPAT; USOCR	OR	OFF	2007/06/03 20:23
L176	5	("6624826").URPN.	USPAT	OR	OFF	2007/06/03 20:23
L177	10	("20020109712"   "20030085913"   "6084590"   "6108001"   "6121963"   "6333753"   "6369835"   "6480191"   "6624826"   "6665835").PN.	US-PGPUB; USPAT; USOCR	OR	OFF	2007/06/03 20:23
L178	5	("6624826").URPN.	USPAT	OR	OFF	2007/06/03 20:23
L179	14892	("bar code" barcode) & document	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT	OR	OFF	2007/06/03 20:23
L180	11	"barcoded document"	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT	OR	OFF	2007/06/03 20:23
L181	22	barcoded same forms	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT	OR	OFF	2007/06/03 20:23
L182	27	("5625562").URPN.	USPAT	OR	OFF	2007/06/03 20:23
L183	4709	"paper form"	USPAT	OR	OFF	2007/06/03 20:23
L184	342	L38 & (barcode barcoded "bar code")	USPAT	OR	OFF	2007/06/03 20:23
L185	80	("5060980").URPN.	USPAT	OR	OFF	2007/06/03 20:23
L186	80	("5060980").URPN.	USPAT	OR	OFF	2007/06/03 20:23
L187	16	("3643069"   "3933094"   "4013997"   "4248528"   "4254329"   "4478584"   "4494862"   "4588211"   "4634148"   "4665004"   "4704517"   "4724309"   "4728984"   "4757348"   "4786940"   "4864111").PN.	US-PGPUB; USPAT; USOCR	OR	OFF	2007/06/03 20:23
L188	80	("5060980").URPN.	USPAT	OR	OFF	2007/06/03 20:23
L189	97	"audio browser"	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT	OR	OFF	2007/06/03 20:23
L190	28	L44 & field\$	USPAT	OR	OFF	2007/06/03 20:23

## EAST Search History

L191	1585	"audio form\$"	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT	OR	OFF	2007/06/03 20:23
L192	66	L46 & "data field\$"	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT	OR	OFF	2007/06/03 20:23
L193	5	("6519564").URPN.	USPAT	OR	OFF	2007/06/03 20:23
L194	26	L45 & (time temporal)	USPAT	OR	OFF	2007/06/03 20:23
L195	6342	roylance	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT	OR	OFF	2007/06/03 20:23
L196	1837	L50 & samsung.as.	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT	OR	OFF	2007/06/03 20:23



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**1** [UIST'007 \(panel\): where will we be ten years from now?](#)

Robert J. K. Jacob, Steven K. Feiner, James D. Foley, Jock D. Mackinlay, Dan R. Olsen  
October 1997 **Proceedings of the 10th annual ACM symposium on User interface software and technology UIST '97**

Publisher: ACM Press

Full text available: [pdf\(567.74 KB\)](#) Additional Information: [full citation](#), [citations](#), [index terms](#)

**Keywords:** UIST'2007, future, human-computer interaction, prediction, user interface software and technology

**2** [Short Papers: Increasing performances and personalization in the interaction with a call center system](#)

Federica Cena, Ilaria Torre  
January 2004 **Proceedings of the 9th international conference on Intelligent user interfaces IUI '04**

Publisher: ACM Press

Full text available: [pdf\(179.30 KB\)](#) Additional Information: [full citation](#), [abstract](#), [references](#), [index terms](#)

This paper describes the innovative combination of speech recognition and personalized response generation with the *adaptive* routing of calls to the operator which best fits the caller's features. The project aims at supporting the user incrementally, starting from a personalized automatic support and moving to a proficient human one, when it is needed. In particular the paper shows the adaptive workflow of the answering process and focuses on the principles for providing the perso ...

**Keywords:** VUI voice user interface, adaptation, automatic response, call center, calls routing management, speech recognition

**3** [Digital sociability: Designing social presence of social actors in human computer interaction](#)

Kwan Min Lee, Clifford Nass  
April 2003 **Proceedings of the SIGCHI conference on Human factors in computing systems CHI '03**

**Publisher:** ACM Press

Full text available: [pdf\(295.50 KB\)](#) Additional Information: [full citation](#), [abstract](#), [references](#), [citations](#), [index terms](#)

This study examines the interaction effect between user factors and media factors on feelings of social presence which are critical in the design of virtual reality systems and human computer interfaces. Both Experiment 1 and Experiment 2 show that matching synthesized voice personality to user personality positively affects users' (especially extrovert users') feelings of social presence. Experiment 2 also reveals that users feel a stronger sense of social presence when the personality of synth ...

**Keywords:** computers are social actors, consistency-attraction, media equation, presence, similarity-attraction, social presence, telepresence

- 4 [Evangelising language technology: a practically-focussed undergraduate program](#)   
 Robert Dale, Diego Mollá Aliod, Rolf Schwitter  
 July 2002 **Proceedings of the ACL-02 Workshop on Effective tools and methodologies for teaching natural language processing and computational linguistics - Volume 1**

**Publisher:** Association for Computational Linguistics

Full text available: [pdf\(66.52 KB\)](#) Additional Information: [full citation](#), [abstract](#), [references](#)

This paper describes an undergraduate program in Language Technology that we have developed at Macquarie University. We question the industrial relevance of much that is taught in NLP courses, and emphasize the need for a practical orientation as a means to growing the size of the field. We argue that a more evangelical approach, both with regard to students and industry, is required. The paper provides an overview of the material we cover, and makes some observations for the future on the basis ...

- 5 [Natural language processing in the undergraduate curriculum](#)   
 Robert Dale, Diego Mollá-Aliod, Rolf Schwitter  
 January 2003 **Proceedings of the fifth Australasian conference on Computing education - Volume 20 ACE '03**

**Publisher:** Australian Computer Society, Inc.

Full text available: [pdf\(132.78 KB\)](#) Additional Information: [full citation](#), [abstract](#), [references](#), [index terms](#)

The paper has two purposes: first, we argue that natural language processing, and particularly those aspects of that field often referred to as language technology, should play an important role in the computer science curriculum; second, we describe in broad terms the content of an undergraduate program we have developed at Macquarie University that covers this material. We question the industrial relevance of much that is taught in NLP courses, and emphasize the need for a practical orientation ...

**Keywords:** computational linguistics, language technology, natural language processing

- 6 [Abstract user interface representations: how well do they support universal access?](#)   
 Shari Trewin, Gottfried Zimmermann, Gregg Vanderheiden  
 June 2002 **ACM SIGCAPH Computers and the Physically Handicapped , Proceedings of the 2003 conference on Universal usability CUU '03**, Issue 73-74

**Publisher:** ACM Press

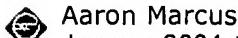
Full text available: [pdf\(155.89 KB\)](#) Additional Information: [full citation](#), [abstract](#), [references](#), [citations](#), [index terms](#)

This paper examines four XML languages for abstract user interface representation: UIML, XIML, XForms and AIAP. It discusses whether the high level architectures of these languages support the requirements of universal usability by allowing use of personal

interfaces. Specific technical requirements include separation of data from presentation, explicit declarative representation of interface elements, their state, dependencies, and semantics, flexibility in inclusion of alternative resources an ...

**Keywords:** AIAP, UIML, XForms, XIML, abstract user interface, device-independence, modality-independence, universal usability

**7 Fast forward: The next revolution: vehicle user interfaces**



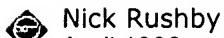
Aaron Marcus  
January 2004 **Interactions**, Volume 11 Issue 1

**Publisher:** ACM Press

Full text available: pdf(203.57 KB) Additional Information: [full citation](#), [abstract](#), [references](#), [citations](#), [index terms](#)  
 html(23.18 KB)

Imagine having to think about safety, usability, and aesthetics issues for the user interface of a two-ton mobile device hurtling through space at 100 km/hr. Now you get the picture.

**8 Where are the desks for the virtual class?**



Nick Rushby  
April 1998 **ACM SIGCUE Outlook**, Volume 26 Issue 2

**Publisher:** ACM Press

Full text available: pdf(377.03 KB) Additional Information: [full citation](#), [abstract](#), [index terms](#)

The need for desks on which to put desktop computers and for laps on which to use laptop computers seems an unnecessary constraint for the virtual class. The concept of flexibility in learning is central to the virtual class and that is going to require mobile learning solutions. The current generation of mobile devices give us Internet and world wide web access: the next generation will have greater bandwidth and will be able to support multimedia. This paper draws upon experience of mobile sol ...

**9 A HW/SW co-design environment for multi-media equipments development using inverse problem**

F. Suzuki, H. Koizumi, M. Hiramine, K. Yamamoto, H. Yasuura, K. Okino  
March 1997 **Proceedings of the 5th International Workshop on Hardware/Software Co-Design CODES '97**

**Publisher:** IEEE Computer Society

Full text available: pdf(728.10 KB)  
 Publisher Site Additional Information: [full citation](#), [abstract](#)

Multimedia equipment development must provide functions that are adjusted to human sensibilities. Realization of such functions depends on how the three transfer levels of perception, recognition and susceptibility are handled. In this paper, we deal with perception by employing an inverse problem to characterize the system and correctly reproduce signals. To accommodate recognition and susceptibility, we propose an optimization method in which results are compared repeatedly with a model of hum ...

**Keywords:** audio circuitry, conceptual stage, cost estimates, development cycle reduction, evaluation, filter design, hardware/software codesign environment, human recognition characteristics, human sensibilities, inverse problem, multimedia communication, multimedia equipment development, netlist generation, numerical models, optimization method, perception, performance estimates, playback, repeated results comparison, semiconductor circuits, semiconductor production, signal reproduction, susceptibility, system response, television receiver

**10 The design of interactive simulations**

Alfred W. Jones

March 1985 **Proceedings of the 18th annual symposium on Simulation ANSS '85**

Publisher: IEEE Computer Society Press

Full text available:  pdf(1.11 MB) Additional Information: [full citation](#), [abstract](#), [references](#), [index terms](#)

We propose a methodology for developing simulations in the interactive mode. Rather than use an iconic model for doing so, we show how the use of systems theory representation enhances the interaction. This not only facilitates debugging, but is of fundamental assistance in the model development itself. Although recent advances in the realistic portrayal of systems has made great advances, the systems representation has been neglected in considering interaction. Our hope is that our observa ...

**11 Handling infinite temporal data**

 F. Kabanza, J.-M. Stevenne, P. Wolper

April 1990 **Proceedings of the ninth ACM SIGACT-SIGMOD-SIGART symposium on Principles of database systems PODS '90**

Publisher: ACM Press

Full text available:  pdf(1.26 MB) Additional Information: [full citation](#), [abstract](#), [references](#), [citations](#), [index terms](#)

In this paper, we present a powerful framework for describing, storing, and reasoning about infinite temporal information. This framework is an extension of classical relational databases. It represents infinite temporal information by generalized tuples defined by linear repeating points and constraints on these points. We prove that relations formed from generalized tuples are closed under the operations of relational algebra. A characterization of the expressiveness of generalized relati ...

**12 An interfaced based architecture for business information systems**

 Johannes Siedersleben

November 1998 **Proceedings of the third international workshop on Software architecture ISAW '98**

Publisher: ACM Press

Full text available:  pdf(397.15 KB) Additional Information: [full citation](#), [references](#), [index terms](#)

**Keywords:** Domain-specific architectures, architectural styles and patterns, generic architectures

**13 Conjunction as composition**

 Pamela Zave, Michael Jackson

October 1993 **ACM Transactions on Software Engineering and Methodology (TOSEM)**,

Volume 2 Issue 4

Publisher: ACM Press

Full text available:  pdf(2.17 MB) Additional Information: [full citation](#), [abstract](#), [references](#), [citations](#), [index terms](#), [review](#)

Partial specifications written in many different specification languages can be composed if they are all given semantics in the same domain, or alternatively, all translated into a common style of predicate logic. The common semantic domain must be very general, the particular semantics assigned to each specification language must be conducive to composition, and there must be some means of communication that enables specifications to build on one another. The criteria for success are that ...

**Keywords:** compositional specification, multiparadigm specification, practical specification

**14 Access control: Resiliency policies in access control**

 Ninghui Li, Mahesh V. Tripunitara, Qihua Wang

October 2006 **Proceedings of the 13th ACM conference on Computer and communications security CCS '06**

Publisher: ACM Press

Full text available:  pdf(338.57 KB) Additional Information: [full citation](#), [abstract](#), [references](#), [index terms](#)

We introduce the notion of resiliency policies in the context of access control systems. Such policies require an access control system to be resilient to the absence of users. An example resiliency policy requires that, upon removal of any  $s$  users, there should still exist  $d$  disjoint sets of users such that the users in each set together possess certain permissions of interest. Such a policy ensures that even when emergency situations cause some users to be absent, there still exi ...

**Keywords:** access control, fault-tolerant, policy design

**15 Locks with constrained sharing (extended abstract)**

 Divyakant Agrawal, Amr El Abbadi

April 1990 **Proceedings of the ninth ACM SIGACT-SIGMOD-SIGART symposium on Principles of database systems PODS '90**

Publisher: ACM Press

Full text available:  pdf(863.43 KB) Additional Information: [full citation](#), [abstract](#), [references](#), [citations](#), [index terms](#)

In this paper, we propose a new mode for locks that permits sharing in a constrained manner. We develop a family of locking protocols, the strictest of which is the two phase locking protocol while the most permissive recognizes all conflict-preserving serializable histories. This is the first locking-based protocol that can recognize the entire class of conflict-preserving serializable histories.

**16 Session 5B: Deterministic network coding by matrix completion**

Nicholas J. A. Harvey, David R. Karger, Kazuo Murota

January 2005 **Proceedings of the sixteenth annual ACM-SIAM symposium on Discrete algorithms SODA '05**

Publisher: Society for Industrial and Applied Mathematics

Full text available:  pdf(1.05 MB) Additional Information: [full citation](#), [abstract](#), [references](#), [citations](#)

We present a new deterministic algorithm to construct network codes for multicast problems, a particular class of network information ow problems. Our algorithm easily generalizes to several variants of multicast problems. Our approach is based on a new algorithm for *maximum-rank completion of mixed matrices*--taking a matrix whose entries are a mixture of numeric values and symbolic variables, and assigning values to the variables so as to maximize the resulting matrix rank. Our algorith ...

**17 Random Weighted Laplacians, Lovász minimum digraphs and finding minimum separators**

Joseph Cheriyan

January 1993 **Proceedings of the fourth annual ACM-SIAM Symposium on Discrete algorithms SODA '93**

Publisher: Society for Industrial and Applied Mathematics

Full text available:  pdf(970.09 KB) Additional Information: [full citation](#), [references](#), [citations](#), [index terms](#)

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